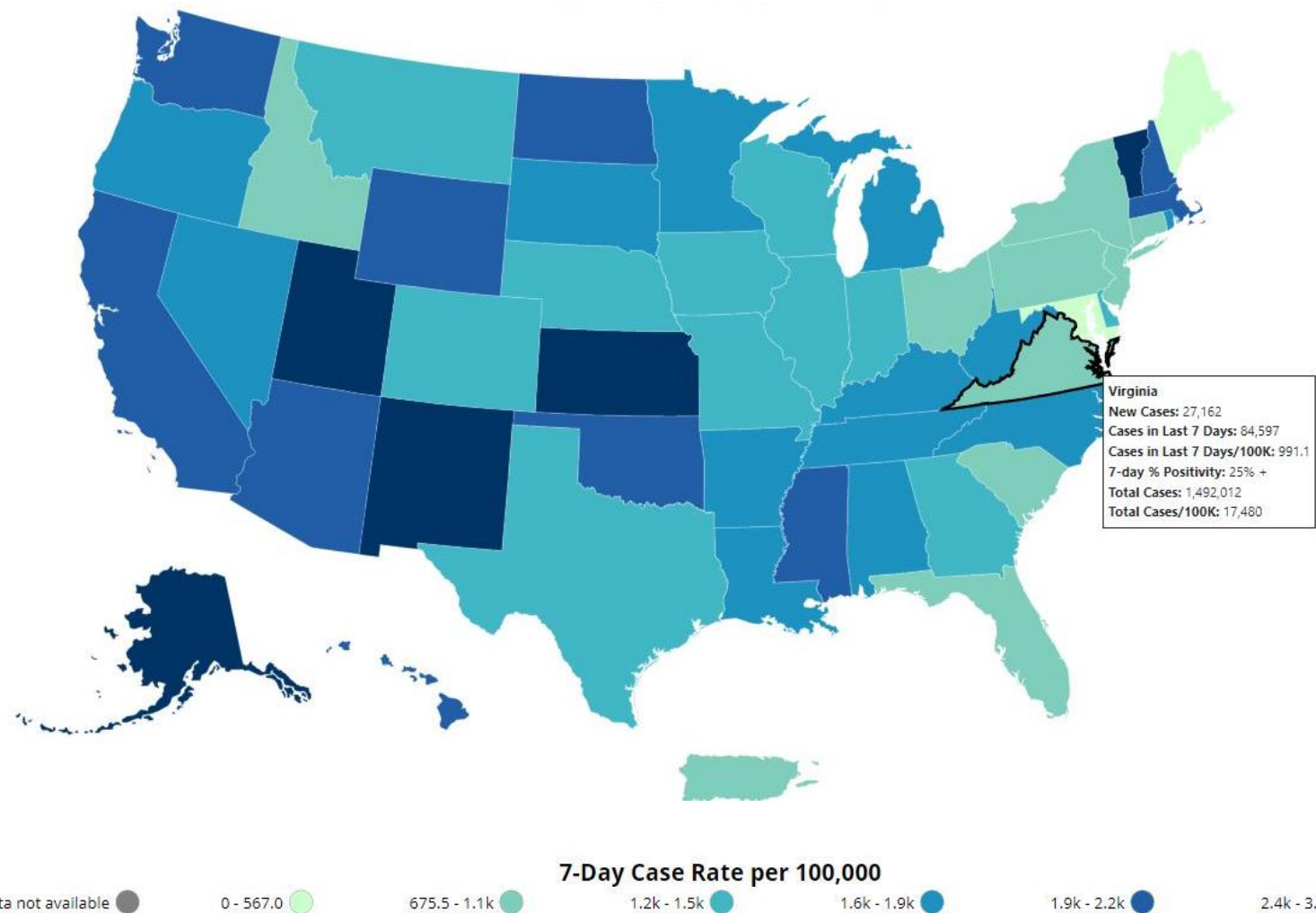

Virginia COVID-19 Surveillance Data Update

January 26, 2022



US COVID-19: 7-Day Case Rate per 100,000, by State/Territory



	Cases in the Last 7 Days Per 100k Population
Virginia	991.1 (-24.5%)
U.S.	1,459.8 (-1.3%)
Utah	3,045.1 (+121.1%)
Alaska	2,986.4 (+125.2%)
New Mexico	2,559.9 (+160.9%)

Our Neighbors

Rates Higher than Virginia

North Carolina, **1,827.6 (+84.9%)**
West Virginia, **1,756.4 (+3.1%)**
Tennessee, **1703.1 (-0.1%)**
Kentucky, **1,725.4 (+80.1%)**

Rates Lower than Virginia:

District of Columbia, **946.4 (+19.4%)**
Maryland, **531 (-45.7%)**

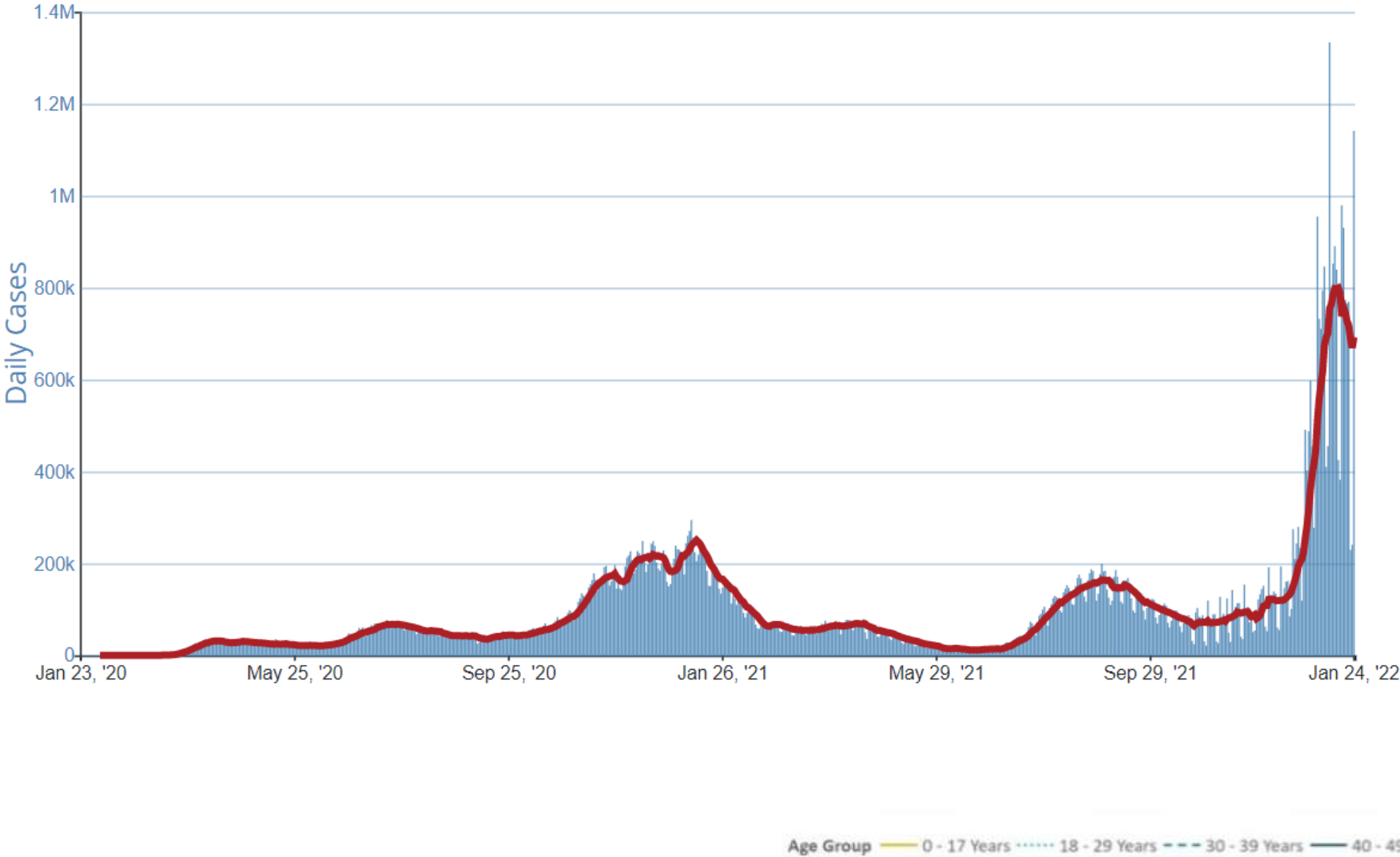
Daily COVID-19 deaths in the U.S.

Feb. 29, 2020, to Jan. 23, 2022; 7-day rolling average



Data: [Our World in Data](#); Chart: Will Chase/Axios

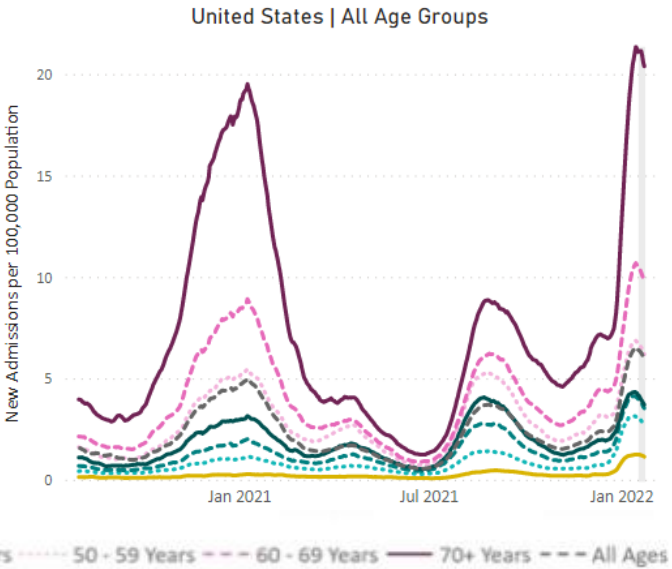
Daily Trends in Number of COVID-19 Cases in The United States Reported to CDC



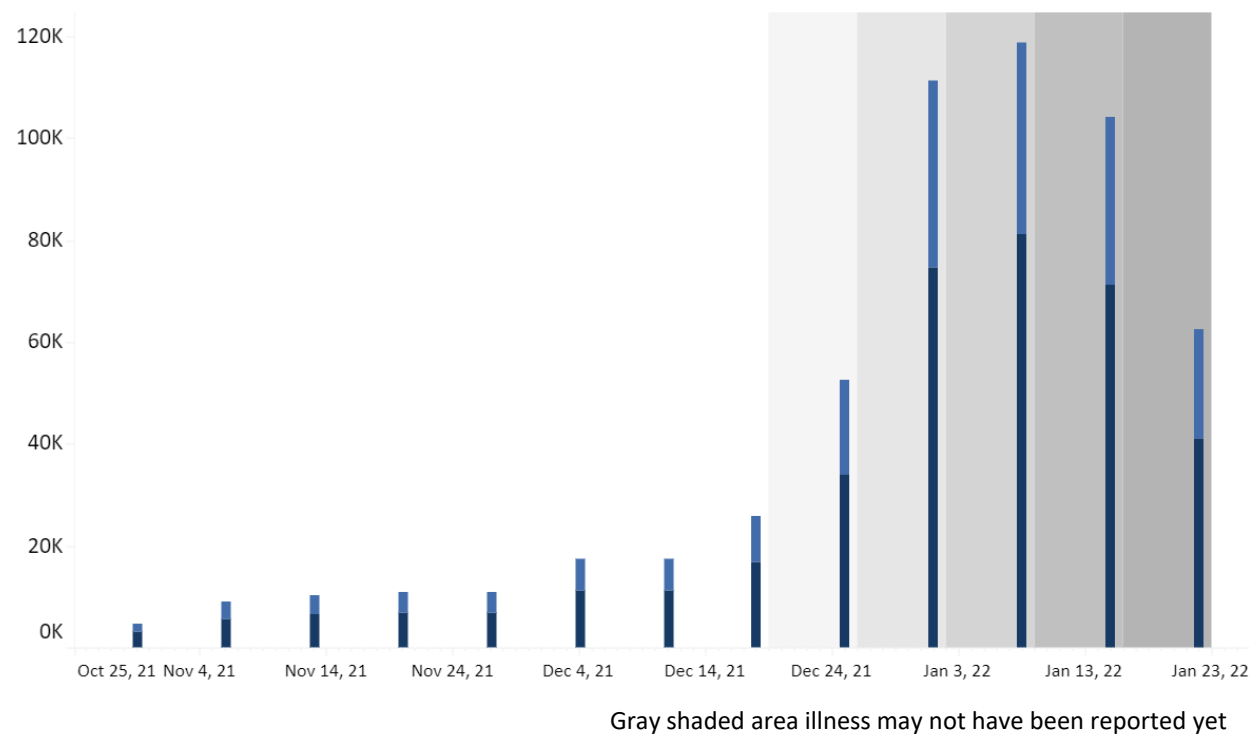
Compared to last week, **cases** decreased to 692,359 (7-day MA) per day (-6.2%)

Hospitalizations decreased to 19,754 (7-day MA) per day (-8.2%)

Deaths increased to 2,166 (7-day MA) per day (+20.9%)



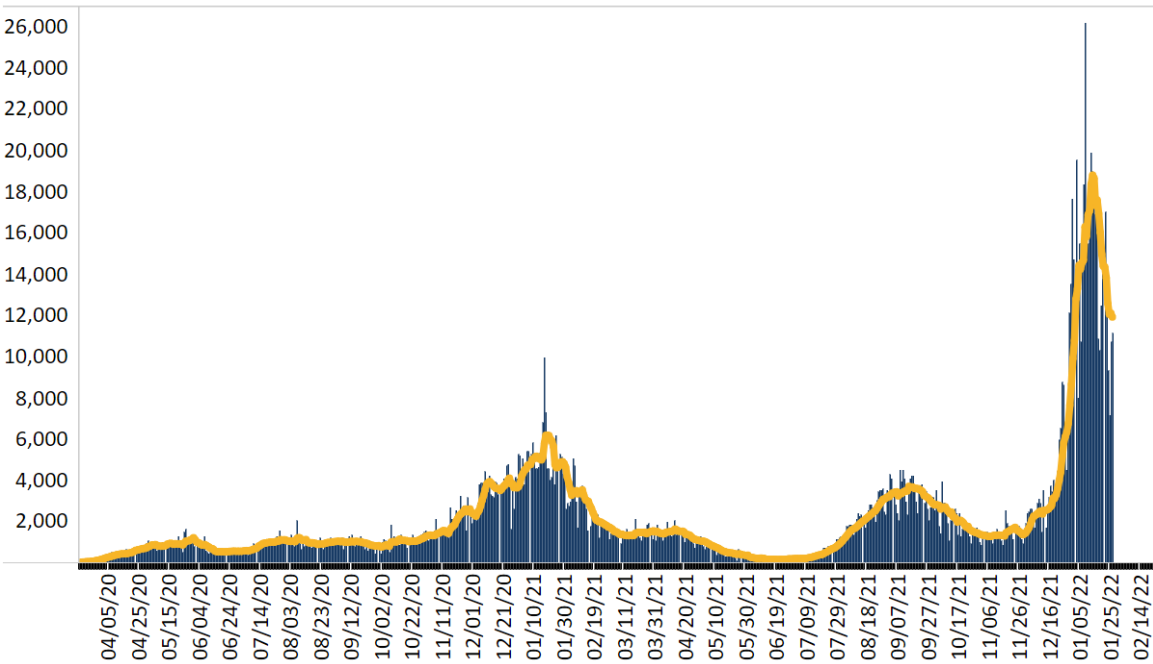
Cases by Date of Symptom Onset, Past 13 weeks



Compared to last week, **cases decreased** to 11,891 (7-day MA) from 14,947 per day (-20%)

Hospitalizations decreased to 3,693 per day (-5%)

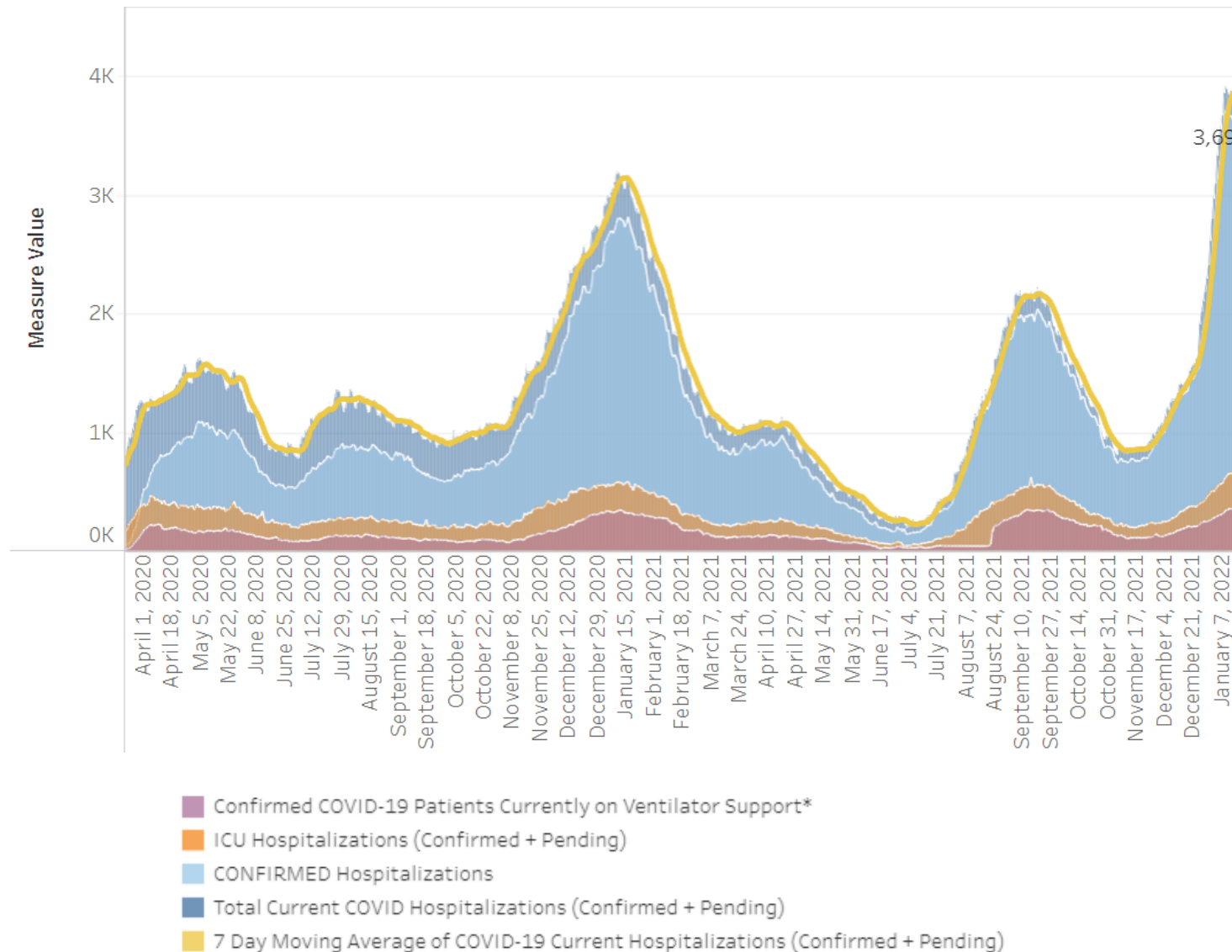
Cases by Date Reported, All Reporting Timeline



VDH Death's trend is based upon Date of Death

Source: [Cases – Coronavirus \(virginia.gov\)](#), [Cases and Deaths - Coronavirus \(virginia.gov\)](#), [VHHA Hospitalizations – Coronavirus \(virginia.gov\)](#), Data represent a 7-day moving average

COVID-19 in Virginia Hospitals

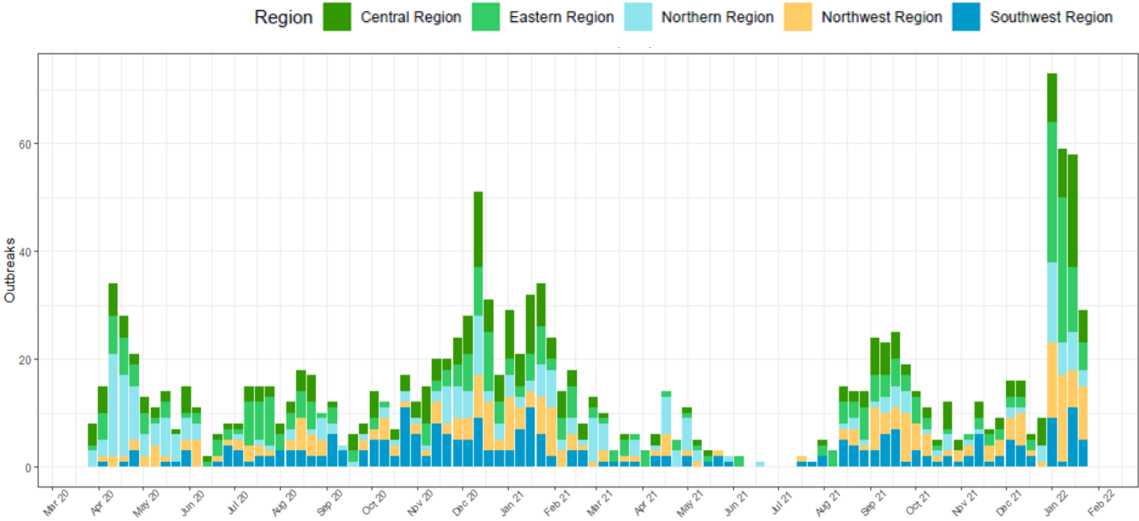


- Compared to last week hospitalizations **decreased to 3,693** (7-day MA) from 3,875 (-5%)
- Compared to last week. ICU hospitalizations have **decreased to 604** from 676 (-11%)
- 359 patients are currently on ventilator support (-5%)

Key Trends

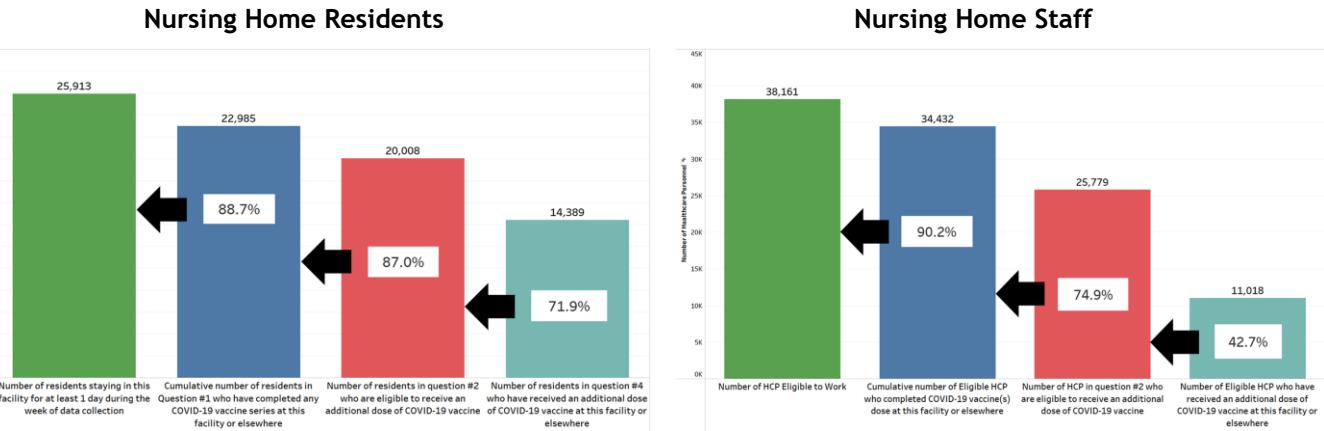
- There were **237 LTCF COVID-19 outbreaks reported in the past 30 days**: 70 in Eastern, 59 in Central, 48 in Northwest, 34 in Northern, and 26 in Southwest (see figure top right).
- The number of reported staff cases has declined in the past couple of weeks. The number of reported resident cases has slightly declined from the previous reporting week (see figure bottom right).
 - For the reporting week ending January 23, 2022, **1,019 resident and 1,132 staff cases were reported to NHSN**. Data for this reporting week are preliminary.
- For reporting week ending January 16, 2022, data reported from 282 nursing homes showed **89% of residents were fully vaccinated**; data reported from 282 nursing homes showed **90% of staff were fully vaccinated** (see figures bottom left).
 - Of the nursing home residents eligible to receive an additional dose or booster, 72% have received an additional dose or booster of COVID-19 vaccine.
 - Of the nursing home healthcare personnel eligible to receive an additional dose or booster, 43% have received an additional dose or booster of COVID-19 vaccine.

Number and Region of LTCF COVID-19 Outbreaks by Date VDH Notified



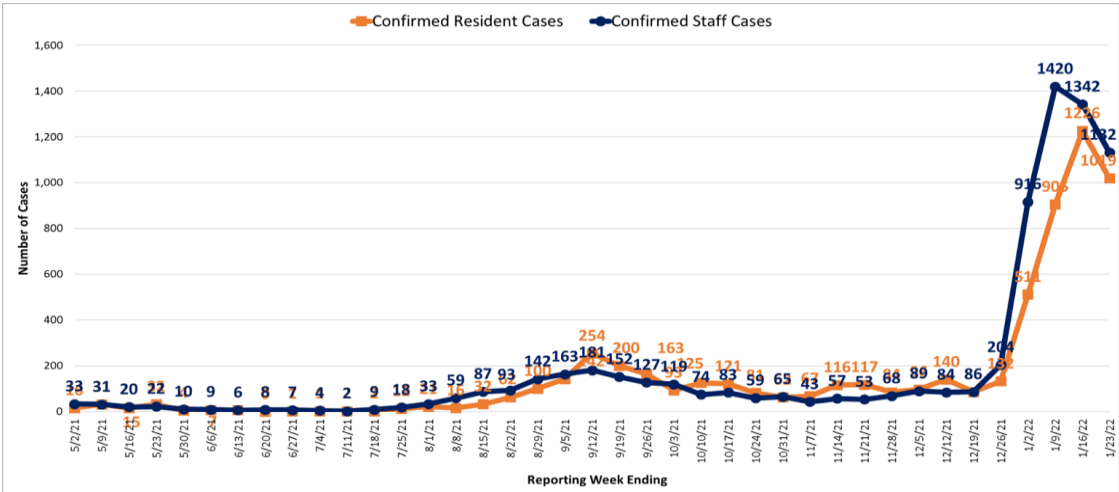
Outbreaks reported from nursing homes, assisted living facilities, and multicare facilities to VDH with a confirmed or suspected etiologic agent of SARS-CoV-2. Data are from the Virginia Outbreak Surveillance System as of 1/24/2022 and are subject to change.

COVID-19 Booster Vaccination in Virginia Nursing Homes (n=286)



Data are from the National Healthcare Safety Network (NHSN) as of 1/25/2022 and are subject to change, including booster eligibility per [updated vaccine guidance](#). In Virginia, 282 nursing homes reported resident vaccination data for reporting week ending 1/16/2022; 282 nursing homes reported staff vaccination data for reporting week ending 1/16/2022. For staff type definitions, refer to [NHSN Table of Instructions](#).

Nursing Home Resident and Staff COVID-19 Cases



Data are from NHSN as of 1/25/2022 and are subject to change. For reporting information, please refer to the NHSN data collection forms: [residents](#), [staff](#).

Metrics date: 1/23/2022

New cases per 100k within the last 7 days

% Positivity 7-day moving average

COVID-like ED visits rate per 100k

Central

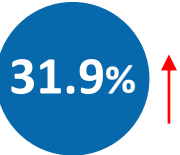
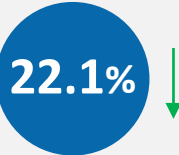
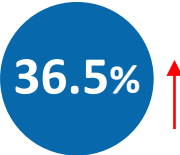
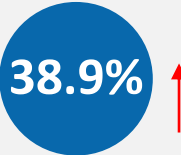
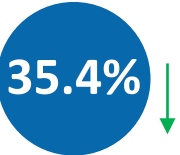
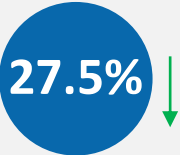
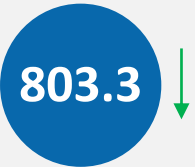
Eastern

Far Southwest

Near Southwest

Northern

Northwest



Burden	Level 0	Level 1	Level 2	Level 3	Level 4
New Cases	<10	10-49		50-100	>100
% Positivity	<3	3-5	5-8	8-10	>10
CLI ED Visits	<4		4-5.9		≥6

Symbol	Trend
↑	Increasing
↓	Decreasing
○	Fluctuating

Please note: the methods used this week have changed slightly; data is now compared from Sunday to Sunday instead of Wednesday to Wednesday

[SARS-CoV-2 Omicron VOC Transmission in Danish Households | medRxiv](#): December 27, 2021

- **Summary:** Estimating transmission dynamics within Danish households during December 2021 to estimate household secondary attack rate and secondary infections during a 1-7 day follow-up period.
- **Key Findings:** Households found increased transmission for unvaccinated individuals, and a reduced transmission for booster-vaccinated individuals, compared to fully vaccinated individuals. Those **fully vaccinated and booster-vaccinated individuals are less susceptible to infection compared to unvaccinated individuals, AND booster-vaccinated individuals generally had a reduced transmissibility.** Comparatively **unvaccinated individuals had a higher transmissibility compared to fully vaccinated individuals**

Table 2: Effect of Vaccination

	Susceptibility		Transmissibility
	Omicron households	Delta households	All households
Unvaccinated	1.04 (0.87-1.24)	2.31 (2.09-2.55)	1.41 (1.27-1.57)
Fully vaccinated	ref (.)	ref (.)	ref (.)
Booster-vaccinated	0.54 (0.40-0.71)	0.38 (0.32-0.46)	0.72 (0.56-0.92)
Number of observations	27,874	27,874	27,874
Number of households	11,937	11,937	11,937

Table 3: Relative effect of the Omicron VOC

	Unvaccinated	Fully vaccinated	Booster-vaccinated
Omicron households	1.17 (0.99-1.38)	2.61 (2.34-2.90)	3.66 (2.65-5.05)
Delta households	ref (.)	ref (.)	ref (.)
Number of observations	27,874	27,874	27,874
Number of households	11,937	11,937	11,937

[Saliva swabs are the preferred sample for Omicron detection \(medrxiv.org\)](#): December 24, 2021

- **Summary:** An evaluation of the diagnostic performance of mid-turbinate (MTS) and saliva swabs collected and tested amongst 382 acutely symptomatic non-hospitalized patients in Cape Town.
- **Key Findings:** **Saliva swabs were found to have 100% positive percent agreement (95% CI: 90-100%) compared to 86% (95% CI: 71-94%) for MTS.** This suggests the **viral shedding is higher in saliva relative to nasal samples and results in improved overall diagnostic performance of saliva swabs.**

[Viral dynamics and duration of PCR positivity of the SARS-CoV-2](#): January 14, 2022

- **Summary:** Using data (n = 10,324) from 527 participants in the NBA's occupational health program collected between July 5, 2021 – Jan 10, 2022, the study quantified the duration of viral proliferation (time from first possible detection to peak viral concentration), clearance rate (time from peak viral concentration to clearance of acute infection), and peak viral concentration for individuals with acute Omicron and Delta variant SARS-CoV-2 infections.
- **Key Findings:** For those infected with the Omicron variant, the study observed a **proliferation phase of 4.52 days, a clearance phase of 5.35 days, and an overall inferred mean duration of 9.87 days,** (95% CI 8.83-10.9) relative to 10.9 days (95% CI 9.41-12.4) for Delta infections. The length of the proliferation phase for Omicron infections was especially variable, with individual posterior mean values ranging from 1.1 to 9.7.